<u>REMARKS</u>

I. General

Claims 1-35 were pending in the present application. The present Office Action (mailed October 8, 2008) raises the following issues:

- Claims 1-17 and 35 are rejected under 35 U.S.C. §101;

- Claims 1-8, 11-14, 17-25, 28-31, and 34-35 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,304,852 to Kerr, II et al. (hereinafter *"Kerr"*); and

- Claims 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Kerr* in view of Official Notice.

Applicant respectfully traverses the outstanding rejections raised in the current Office Action, and requests reconsideration and withdrawal thereof in light of the amendments and remarks presented herein.

II. Amendments

Claims 1, 2, 7, 10-12, 17-19, 24, 28-30, 34, and 35 are amended herein, and new claims 36-40 are added. No new matter is added by the amendments or the newly-added claims, as support for the recited limitations can be found throughout the specification, *see e.g.,* paragraphs 0030-0043 and 0046-0058 of the specification.

III. Rejections Under 35 U.S.C. §101

Claims 1-17 and 35 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Applicant respectfully submits that claims 1-17 and 35, as amended herein are directed to proper statutory subject matter under 35 U.S.C. §101.

For instance, amended independent claim 1 recites "receiving user input to a processor-based computer", "processing, by the computer", and "initiating by the computer" (emphasis added). Thus, the claim satisfies at least the machine prong of the machine-or-transformation test set forth in the recent decision of *In re Bilski*, 2007-1130 (Fed. Cir. 10-30-2008).

Similarly, amended independent claim 12 recites "determining by a computer" and "initiating by the computer the action" (emphasis added). Accordingly, claim 12 likewise satisfies at least the machine prong of the machine-or-transformation test set forth in the recent decision of *In re Bilski*, 2007-1130 (Fed. Cir. 10-30-2008).

Amended independent claim 35 recites "processing, by a record processing module" and "processing, by a rule processing engine" (emphasis added). Accordingly, claim 35 likewise satisfies at least the machine prong of the machine-or-transformation test set forth in the recent decision of *In re Bilski*, 2007-1130 (Fed. Cir. 10-30-2008).

In view of the above, Applicant respectfully requests that the outstanding rejections of claims 1-17 and 35 are rejected under 35 U.S.C. §101 be withdrawn.

IV. Rejections Under 35 U.S.C. §102 over *Kerr*

Claims 1-8, 11-14, 17-25, 28-31, and 34-35 are rejected under 35 U.S.C. §102(e) as being anticipated by *Kerr*. Applicant respectfully traverses these rejections for the reasons below.

To anticipate a claim under 35 U.S.C. § 102, a single reference must teach each and every element of the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). In fact, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). Furthermore, for a reference to be anticipatory, "[its] elements must be arranged as required by the claim." *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990), *cited in* M.P.E.P. § 2131. As discussed below, *Kerr* fails to teach all elements of claims 1-8, 11-14, 17-25, 28-31, and 34-35, and therefore fails to anticipate the claims under 35 U.S.C. §102.

Discussion of *Kerr*

Before addressing the individual claims, Applicant first discusses the applied *Kerr* reference. *Kerr* is "directed to remote medication and medical service delivery systems; and more particularly to an apparatus for the monitoring of a patient and/or the delivery of prescribed medications to patients at a remote location." Col. 1, lines 13-17. *Kerr* recognizes that "although drug 'cocktails' or combinations have been very successful in extending the lives and lifestyles of many HIV-positive patients, the drugs often have very complicated protocols." Col. 1, lines 27-30. *Kerr* thus proposes a "remote medication delivery system for providing remote monitoring, and optionally delivering, medication to a patient". Col. 1, lines 61-64.

Kerr thus proposes a remotely monitored medical system (RMMS), such as the "smart pillbox" as shown in its Figure 1:
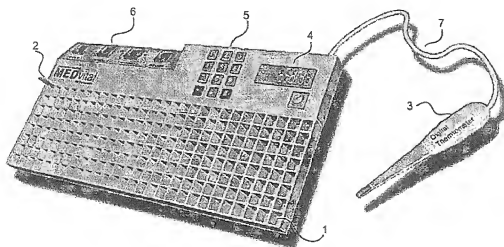

FIG.1

The pillbox may be preloaded with a medication regimen in its matrix of dosage containment units (DCU) 1, *see* col. 3, lines 34-40. Each DCU may include a door with a

respective door sensor that monitors the open/close status of the door. Further, the doors may be locked and may be unlocked only in a particular sequence. *See* Col. 3, line 50 – col. 4, line 14.

The RMMS unit of *Kerr* can be remotely monitored and/or operated. For instance, it may include a communication transmitter and/or receiver for communicating with a remote system. Col. 4, lines 14-58. Also, the RMMS unit of *Kerr* may include "a number of peripheral medical monitoring devices" (col. 4, lines 59-64), such as the digital thermometer 3 (col. 5, lines 54-58).

The RMMS unit "may be designed to automatically review the transmitted data, for example, by a database program that scans all the database records for 'out-of-bounds' conditions, such as combinations of symptoms that may indicate that the patient is in a medically dangerous condition, and if such an 'out-of-bound' alert is detected the RMMS unit may be designed to automatically transmit the data to the remote receiver." Col. 6, lines 24-32. Accordingly, "multiple levels of medical alerts can then be established by programming the automatic database processes to automatically notify the supervising medical personnel of individuals that need further review" (col. 6, lines 35-38). Thus, *Kerr* proposes that its RMMS unit may be preprogrammed to detect certain "out-of-bounds" conditions that the RMMS unit detects for a given user, and in response the RMMS unit may transmit the out-of-bounds data to a remote receiver.

Data transmitted from the RMMS unit may be received by a secure RMMS remote monitor central database, and placement of the data into the database file may further trigger and immediate medical profile update. "In such a medical profile update the database scans the patient's records for 'out-of-bounds' or potentially dangerous medical indications and predetermined statistical and alarm procedures are applied to the medical profile", and "[i]f any alarm conditions are found to exist predefined notification procedures are then implemented". *See* Col. 9, lines 1-30. Accordingly, predefined alarm procedures may be employed for the remote monitor central database for the data received into the database from the RMMS unit of *Kerr*.

<u>Independent Claim 1</u>

Claim 1, as amended herein, recites:

> A rule processing computer-based method comprising:
> <u>receiving user input to a processor-based computer for defining a computer-executable rule</u> that is stored to a computer-readable medium, wherein when executed by the computer the computer-executable rule causes the computer to identify a target group of patients chosen from a group of existing patients;
> receiving user input to the computer defining, in computer-readable information stored to a computer-readable medium, a computer-executable action to be taken by said computer concerning one or more patients within the target group of patients;
> scheduling, in computer-readable information stored to a computer-readable medium, an execution time for the action;
> <u>processing, by the computer, a plurality of computer-based medical records against said computer-executable rule to determine one or more of said medical records that satisfy the rule</u>, wherein each of the medical records contain at least a portion of a corresponding patient's medical history stored to computer-readable medium; and
> initiating by the computer, in accordance with the scheduled execution time, the action concerning corresponding patients to which the determined one or more medical records that satisfy the rule relate. (Emphasis added).

Kerr fails to teach receiving user input to a processor-based computer for defining a computer-executable rule. While *Kerr* makes brief mention of applying certain predefined "out-of-bounds" alarms either in a database contained in the RMMS unit or in a remote monitor central database, *Kerr* does not provide any teaching whatsoever of allowing a user to define a computer-executable rule. Instead, *Kerr's* implementation appears to be limited to only detecting certain predefined "out-of-bounds" conditions.

Further, *Kerr* does not teach processing a plurality of computer-based medical records against such a user-defined computer-executable rule to determine one or more of the medical records that satisfy the rule. Again, *Kerr* does not propose any such user-defined computer-executable rules.

In view of the above, *Kerr* does not teach all elements of claim 1, and thus *Kerr* does not anticipate claim 1 under 35 U.S.C. §102. Therefore, the rejection of claim 1 should be withdrawn.

<u>Independent Claim 12</u>

Claim 12, as amended herein, recites:

> A rule processing computer-based method comprising:
> <u>determining by a computer, for a specific computer-executable rule that is
> stored to a computer-readable medium, a target group of patients, wherein said
> target group of patients comprise at least a subset of patients for whom a
> particular medical service provider has an access key that grants the medical
> service provider access to medical records of the patients</u>;
> determining, for said specific computer-executable rule, an action to be
> initiated by the computer concerning one or more patients within the target group
> of patients whose respective medical records satisfy said specific computer-
> executable rule, <u>wherein the action comprises communicating information to the
> one or more patients</u>;
> determining, for said specific computer-executable rule, an execution time
> for the action; and
> initiating by the computer the action concerning the one or more patients
> within the target group of patients on or after the execution time. (Emphasis
> added).

Kerr fails to teach at least the above-emphasized limitations of claim 12. For instance,
Kerr does not teach determining a target group of patients that comprise at least a subset of
patients for whom a particular medical service provider has an access key that grants the medical
service provider access to medical records of the patients. *Kerr* does not address any such access
key that grants a medical service provider access to patient medical records.

Further, *Kerr* does not teach initiating an action that comprises communicating
information to the one or more patients. At best, *Kerr* proposes to communicate an "out-of-
bounds" condition to medical personnel. *Kerr* does not propose communicating information to
one or more patients whose respective medical records satisfy a specific computer-executable
rule, as recited by claim 12.

In view of the above, *Kerr* does not teach all elements of claim 12, and thus *Kerr* does
not anticipate claim 12 under 35 U.S.C. §102. Therefore, the rejection of claim 12 should be
withdrawn.

Independent Claim 18

Claim 18, as amended herein, recites:

> A computer program product residing on a computer readable medium having a plurality of instructions stored thereon which, when executed by the processor, cause that processor to:
> <u>determine from computer-based medical records of patients for whom a particular medical service provider has an access key that grants the medical service provider access to said computer-based medical records, a target group of said patients whose respective medical records satisfy a rule defined by the medical service provider;</u>
> determine an action to be taken concerning the determined target group of patients; and
> schedule an execution time for the action to be taken concerning the determined target group of patients. (Emphasis added).

Kerr fails to teach at least the above-emphasized limitation of claim 18. For instance, *Kerr* does not teach determining, from computer-based medical records of patients for whom a medical service provider has an access key that grants the medical service provider access to such medical records, a target group of the patients whose respective medical records satisfy a rule defined by the medical service provider. First, as discussed above with claim 1, *Kerr* does not propose any rule that is defined by a medical service provider. Rather, *Kerr* appears to restricted to detection of certain predefined "out-of-bounds" conditions. Further, as discussed above with claim 18, *Kerr* does not address any access key that grants a medical service provider access to patient medical records.

In view of the above, *Kerr* does not teach all elements of claim 18, and thus *Kerr* does not anticipate claim 18 under 35 U.S.C. §102. Therefore, the rejection of claim 18 should be withdrawn.

Independent Claim 29

Claim 29, as amended herein, recites:

> A computer program product residing on a computer readable medium having a plurality of instructions stored thereon which, when executed by the processor, cause that processor to:
> <u>receive user input from a medical service provider for defining a computer-executable rule for identifying one or more patients of said medical service provider who satisfy said rule;</u>
> receive user input from said medical service provider for defining a computer-executable action to be taken concerning the identified one or more patients of said medical service provider who satisfy said rule;
> determine, for the computer-executable rule, an execution time for the action;
> <u>process a plurality of computer-based medical records of patients for whom said medical service provider has an access key that grants the medical service provider access to said computer-based medical records against said computer-executable rule to identify one or more of said patients whose medical records satisfy the rule;</u> and
> initiate, on or after the execution time, the action concerning the one or more patients whose medical records satisfy the rule. (Emphasis added).

Kerr fails to teach at least the above-emphasized limitations of claim 29. For instance, as discussed above with claim 1, *Kerr* does not teach receiving user input from a medical service provider for defining a computer-executable rule. Further, as discussed above with claim 18, *Kerr* does not teach any access key that grants a medical service provider access to patient medical records. Thus, *Kerr* does not teach "process a plurality of computer-based medical records of patients for whom said medical service provider has an access key that grants the medical service provider access to said computer-based medical records against said computer-executable rule to identify one or more of said patients whose medical records satisfy the rule" as recited by claim 29.

In view of the above, *Kerr* does not teach all elements of claim 29, and thus *Kerr* does not anticipate claim 29 under 35 U.S.C. §102. Therefore, the rejection of claim 29 should be withdrawn.

Independent Claim 35

Claim 35, as amended herein, recites:

> A rule processing computer-based method comprising:
> processing, by a record processing module, a plurality of computer-based multi-portion medical records that are stored to a computer-readable repository and that contain medical history information for a plurality of patients for <u>determining a target group of said plurality of patients whose medical records a particular medical service provider is authorized to access</u>, wherein each portion of each of the multi-portion medical records is assigned a respective confidentiality level;
> <u>processing, by a rule processing engine, the medical records of the determined target group of patients against a computer-executable rule defined by said particular medical service provider to identify one or more of said target group of patients whose medical records satisfy the rule;</u>
> determining, by the rule processing engine, an action defined by said particular medical service provider for the rule, said determined action to be taken concerning said identified one or more patients within the target group of patients; and
> scheduling, by the rule processing engine, an execution time for the action. (Emphasis added).

Kerr fails to teach at least the above-emphasized limitations of claim 35. For instance, as discussed above with claim 1, *Kerr* does not teach a computer-executable rule that is defined by a particular medical service provider. Thus, *Kerr* does not teach "processing, by a rule processing engine, the medical records of the determined target group of patients against a computer-executable rule defined by said particular medical service provider to identify one or more of said target group of patients whose medical records satisfy the rule", as recited by claim 35. Further, *Kerr* does not teach a record processing module for "determining a target group of said plurality of patients whose medical records a particular medical service provider is authorized to access", as recited by claim 35.

In view of the above, *Kerr* does not teach all elements of claim 35, and thus *Kerr* does not anticipate claim 35 under 35 U.S.C. §102. Therefore, the rejection of claim 35 should be withdrawn.

Dependent Claims

Each of dependent claims 2-8, 11, 13, 14, 17, 19-25, 28, 30, 31, and 34 depends either directly or indirectly from one of independent claims 1, 12, 18, 29, and 35, and thus each inherits all limitations of the respective independent claim from which it depends. It is respectfully submitted that dependent claims 2-8, 11, 13, 14, 17, 19-25, 28, 30, 31, and 34 are allowable not only because of their dependency from their respective independent claim for the reasons discussed above, but also in view of their novel claim features (which both narrow the scope of the particular claims and compels a broader interpretation of their respective independent claim).

V. Rejections Under 35 U.S.C. §103 over *Kerr* in view of Official Notice

Claims 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Kerr* in view of Official Notice. Applicant respectfully traverses these rejections for the reasons below.

The Office Action concedes that *Kerr* does not teach that scheduling an execution time includes specifying a plurality of non-recurring execution times or specifying a recurring execution time. However, the Office Action takes Official Notice that these limitations are well known in the prior art, and asserts that it would have been obvious to modify *Kerr* with these limitations for "having a means of varying the number of times that the notification system notified the patient as well as having a means of specifying the duration between execution times". Page 5 of the Office Action.

Applicant disagrees for several reasons. First, *Kerr* does not appear to provide notification to patients, but instead merely seems to mention providing notification of an "out-of-bounds" condition detected for a patient to medical personnel. Thus, the stated reasoning concerning motivation for including the limitation in *Kerr* that is provided in the Office Action is improper because such motivation purports to rely on some patient notification system provided by *Kerr*, which appears to be absent from the teaching of *Kerr*.

Further, there appears to be no mention in *Kerr* or objective reasoning based on the teaching of *Kerr* for scheduling an execution time (for notification of medical personnel) as a

plurality of non-recurring times or as recurring times. *Kerr* proposes notifying medical personnel responsive to detection of an "out-of-bounds" condition for a patient. There is no objective reasoning for modifying *Kerr* to schedule such notification to occur a plurality of non-recurring times or to occur recurring times. Rather, *Kerr* simply seems to propose that an immediate, one-time notification of medical personnel is desired for a given out-of-bounds condition that is detected for a patient.

In addition, the Examiner has not identified any reference which discloses scheduling a plurality of non-recurring times or scheduling recurring times for executing an action responsive to satisfaction of a user-defined rule by a medical record. Therefore, it is believed that that feature is not capable of instant and unquestionable demonstration as being well-known, as required of Official Notice by M.P.E.P. §2144.03(A), citing *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970).

Alternatively, such an assertion without documentary evidence may be appropriate if the Office Action provides "specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge." M.P.E.P. §2144.03(B), citing, *In re Soli*, 317 F.2d at 946, 37 USPQ at 801, and *In re Chevenard*, 139 F.2d at 713, 60 USPQ at 241. However, because the Examiner's explanation in the Office Action is merely an assertion, rather than reasoning, the Official Notice must fail. Accordingly, the rejection of claims 9-10 are improper and should be withdrawn.

While Applicant has traversed the contents of the Official Notice, Applicant further respectfully requests that the Examiner provide an affidavit or publication supporting such Notice under M.P.E.P. § 2144.03(C) if the Examiner believes such feature is well-known.

VI. New Claims

New claims 36-40 are added herein. Claims 36-38 each depends either directly or indirectly from independent claim 29, and are thus believed to be allowable based at least on their dependency from claim 29 for the reasons discussed above with claim 29.

Claim 39 is an independent claim, which recites:

> A system comprising:
> a computer-readable repository for storing medical records;
> <u>an access key management system for managing access keys that grant a medical service provider authorized access to at least a portion of said medical records</u>; and
> a rule processing engine configured to:
> a) <u>receive input from a medical service provider to define a rule specifying criteria for selecting one or more of said medical records to which said medical service provider has an access key that grants the medical service provider with authorized access</u>;
> b) receive input specifying corresponding action to take when said rule is satisfied;
> c) receive input specifying a corresponding execution time for performing said corresponding action;
> d) process said medical records for which said medical service provider has an access key that grants the medical service provider with authorized access against said rule to determine one or more of said medical records that satisfy the rule; and
> e) initiate, for patients to whom the determined one or more medical records that satisfy the rule relate, said corresponding action to be performed at said corresponding execution time. (Emphasis Added).

Kerr fails to teach at least the above-emphasized limitations of claim 39. Claim 40 depends from claim 39 and further recites that the action comprises communicating information to the patients to whom the determined one or more medical records that satisfy the rule relate. *Kerr* further fails to teach any such communication of information to patients, but instead merely proposes communicating a notification to medical personnel.

Accordingly, these newly-added claims are also believed to be allowable over the art of record.
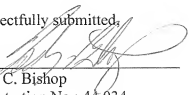
VII. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance.

Applicant believes a fee in the amount of $480.00 for additional claims is due with this response. However, if any additional fee is due, please charge our Deposit Account No. 50-3948, under Order No. 66729/P028US/10613659 from which the undersigned is authorized to draw.

Dated: December 12, 2008   Respectfully submitted,

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